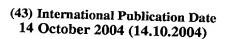
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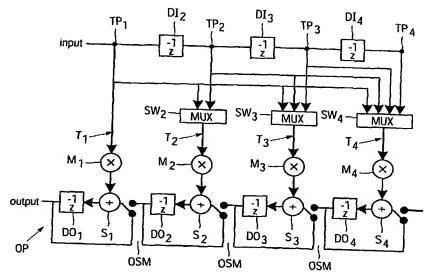
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[Continued on next page]

(54) Title: A FIR FILTER DEVICE FOR FLEXIBLE UP- AND DOWNSAMPLING



(57) Abstract: A FIR filter includes an input pipeline IP with a sequence of input delay cells DI;, each for storing an input sample, and a plurality of N input tap points TP;. An output pipeline includes a sequence of output delay cells DO;, each for storing a sample, a plurality of N summating elements Si for adding at least two samples, and an output switching network OSN for accumulating output values from the summating elements. A sequence of N taps T; are used for coupling the input pipeline to the output pipeline. Each tap includes a respective multiplier Mi for multiplying a sample from an input tap point by a coefficient. At least N-1 of the taps include a switching element for directing a sample from an input tap point through the multiplier to a summating element. The switching elements are arranged to enable supply of a sample from any tap point TPj to a summating element Si, where j <=i.



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A. CLASS	SIFICATION OF SUBJECT MATTER H03H17/06		182004/050339		
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